

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (canceled).
2. (canceled).
3. (currently amended): A Doherty amplifier comprising:
 - an input terminal;
 - input branching circuit means for distributing a signal applied from said input terminal to a first path and a second path;
 - a carrier amplifier for amplifying a signal distributed to the first path by said input branching circuit means;
 - a peak amplifier for amplifying a signal of a predetermined level or higher among signals distributed to the second path by said input branching circuit means;
 - output combining circuit means for combining an output of said carrier amplifier with an output of said peak amplifier; and
 - a gain compensator disposed at a position ahead of said peak amplifier in the second path for changing a gain in accordance with the level of an input signal in order to correct the level of the signal distributed to the second path,
 - said carrier amplifier and said peak amplifier being devices having the same characteristics,

said peak amplifier having a gain smaller than an ideal gain,
wherein said gain compensator has a larger gain, when a signal equal to or higher than the predetermined level is applied, than a gain when a signal lower than the predetermined level is applied, said gain being set based on a transfer conductance of said peak amplifier, and
said gain compensator comprises a parallel circuit comprising an anti-parallel diode and a resistor, or a parallel circuit comprising a diode and a resistor, or a FET, or a bipolar transistor.

4. (canceled).

5. (canceled).

6. (canceled).

7. (previously presented): The Doherty amplifier according to claim 3, wherein said carrier amplifier and said peak amplifier are each composed of an FET, and said gain compensator compensates said peak amplifier for a gm characteristic.

8. (new): A Doherty Amplifier of claim 3 wherein:

said input branching circuit includes a one-quarter wavelength transmission path.

9. (new): A Doherty Amplifier of claim 3 wherein:

said output combining circuit includes a one-quarter wavelength transmission path.

10. (new): An amplifier comprising:

a carrier amplifier for amplifying a first signal derived from an input signal;
a peak amplifier for amplifying a second signal derived from the input signal;
an output terminal outputting a third signal obtained by combining an output of said carrier amplifier with an output of said peak amplifier; and
a gain compensator disposed at a position ahead of said peak amplifier for changing a gain in accordance with the level of the input signal,
said carrier amplifier and said peak amplifier are devices having a substantially similar gain characteristic,
said peak amplifier having a gain smaller than an ideal gain,
wherein said gain compensator has a larger gain, when a signal equal to or higher than the predetermined level is applied, than a gain when a signal lower than the predetermined level is applied, said gain being set based on a transfer conductance of said peak amplifier, and
said gain compensator comprises a parallel circuit composed of an anti-parallel diode and a resistor, or a parallel circuit composed of a diode and a resistor, or an FET, or a bipolar transistor.

11. (new): The amplifier according to claim 10, wherein said carrier amplifier and said peak amplifier each comprise a FET, and said gain compensator compensates said peak amplifier for a g_m (transfer conductance) characteristic.